

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 14, with the following rewritten paragraph:

A large number of fixed and mobile access standards are now available, such as Wideband-Code Division Multiple Access (W-CDMA), Universal Mobile Telephone System-Time Division Duplex (UMTS-TDD), CDMA 2000, Wireless-Local Area Network (W-LAN), EDGE etc, all of which belong to the 3.sup.rd generation wireless standards. Each type of access standard has its own particular network concept; where Mobile Internet Protocol (Mobile IP) and the General Packet Radio Service (GPRS) tunnelling tunneling protocol are the main two concepts. The invention, however, is not limited to the above mentioned concepts.

Please replace the paragraph beginning on page 1, line 35, with the following rewritten paragraph:

Thus, there is a problem with interoperability between heterogeneous networks mainly because of problems with authentication and service transparency in and between different networks. It is, of course, theoretically possible to harmonise harmonize disparate networks at all of the above levels and thus creating interoperability. There is however, a need for an organic way of integrating heterogeneous networks and thus providing access independent global roaming.

Please replace the paragraph beginning on page 2, line 8, with the following rewritten paragraph:

The present invention therefore provides a solution to the problems of integrating heterogeneous networks, providing for access independent global roaming and access to services via heterogeneous networks, without a need for harmonising harmonizing disparate networks.

Please replace the paragraph beginning on page 2, line 31, with the following rewritten paragraph:

standardising standardizing and modularising modularizing a client or terminal architecture that supports the above entities.

Please replace the paragraph beginning on page 3, line 25, with the following rewritten paragraph:

Although the invention has been summarized summarized above, the method and arrangement according to the appended independent claims define the scope of the invention. Various embodiments are further defined in the dependent claims.

Please replace the paragraph beginning on page 4, line 21, with the following rewritten paragraph:

The various features of the invention will now be described with reference to the figures, in which like parts are identified with the same reference characters. In the following description, for purpose of explanation and not limitation, specific details are set forth, such as particular circuits, components, techniques, etc. in order to provide a thorough understanding of the present invention. However, it will be apparent to one skilled in the art that the present invention may be practised practiced in other embodiments that depart from these specific details. In other instances, detailed descriptions of well-known methods, devices and circuits are omitted so as not to obscure the description of the present invention.

Please replace the paragraph beginning on page 6, line 23, with the following rewritten paragraph:

The different access networks in the transport domain must have the appropriate interfaces and support agreed on Quality of Service definitions, a so-called packet pipe 130. The packet pipe 130 provides layer 1 and layer 2 functions to convey packet data traffic across radio air interfaces, for example. As part of the transport domain, the access networks must also be able to process charging information in the embodiment of the invention wherein transport charging is independent of service charging. That is,

wherein access charging is independent from any other charging, and is seen as a separate entity. The transport domain thus involves means for charging a subscriber for transport used, e.g. via a pre-paid card, credit card, cash card or other means. It is not necessary that a subscriber is authenticated or authorised authorized by a service provider before transport charging takes place. It is only necessary to validate the pre-paid card, credit card, cash card or the like, i.e. it is possible to implement anonymous payment methods for transport. Access providers can accept different types of payment methods for payment of transport; e.g. some access providers may accept all major credit cards and their own special cash card for paying for access to their networks. This can be compared to when stores have a sticker on the entrance informing what credit cards they accept, for example.

Please replace the paragraph beginning on page 8, line 11, with the following rewritten paragraph:

The LPEP 110 is also responsible for authenticating the subscriber via e.g. a PIN-code or a fingerprint reader. If the subscriber is authorised authorized he gains access to the LPEP 110. It is possible that the LPEP 110 serves more than one subscriber, then the authentication database 320 stores several subscribers A, B, . . . 330 and their corresponding identification keys key 1, key 2, . . . 340. The LPEP key 350 on the other hand is used for identifying the LPEP 110 to the SMP 100 and for encrypting the traffic between the LPEP 110 and the SMP 100 or CV 220.

Please replace the paragraph beginning on page 8, line 19, with the following rewritten paragraph:

During a communication session the LPEP 110 maintains an accounting log 360 containing accounting information 370 pertaining to the session, such as start time, stop time and service utilized utilized. This accounting log 360 can be used by the SMP 100 for billing and auditing purposes. At completion of the session the LPEP 110 can forward the accounting log 360 to the SMP 100 and the SMP 100 replies in agreement or disagreement, i.e. compare the accounting log in the SMP 100 with the one

generated in the LPEP 110. Alternatively the accounting log 360 is transmitted from the LPEP 110 to the SMP 100 at regular intervals, such as at the end of the day.

Please replace the paragraph beginning on page 11, line 5, with the following rewritten paragraph:

The policy enforcement engine 610 and the policy repository 620 in the control part connect the modems 600a-c in the access part with the user 660 and the API's in the service part. More specifically the policy enforcement engine 610 in the control part has the responsibility for a variety of tasks such as authenticating the user 660 to the terminal, authorising authorizing the user 660 to services and collecting accounting data. These and other tasks will be further described in relation to FIG. 8.

Please replace the paragraph beginning on page 13, line 27, with the following rewritten paragraph:

The access discovery function 680, which is continuously active, has scanned all available access networks and found the above mentioned access possibilities ~~700-725~~ 700, 705, 710, 715, 720, and 725 and made a record of what is available. The user 660 now e.g. wants to initiate a web-service and thus via the applications interface 650 agree on parameters, i.e. some Quality of Service value for the session, e.g. the transmission rate. The applications interface 650 thereafter asks the policy enforcement engine 610 to enact the requested web-service. The policy enforcement engine 610 then collects data from the policy repository 620 and the access selection function 690 to set up a channel that complies with the agreed parameters and the requested service and thereafter activates the connection.

Please replace the paragraph beginning on page 14, line 10, with the following rewritten paragraph:

Another possibility occurs if the terminal does not have the appropriate modem 600a-c for the best access network. Imagine for example that the GPRS network 710 is most suitable for the requested web-service but the user terminal only has a W-CDMA interface. The solution is the Bluetooth™ Bluetooth modem 740 a-b attached to the

terminal, which makes it possible to use the modems 600a-c of a neighbouring terminal. The Bluetooth™ Bluetooth modem 740a-b in the neighbouring terminal then acts as an access point or bridge to access the GPRS modem of the other terminal.

Please replace the paragraph beginning on page 14, line 18, with the following rewritten paragraph:

The user or subscriber physical physically owns the PEP. The content of the PEP can be the ownership of many parties. The subscriber controls access to the PEP, and can delegate these rights to another party, for example an operator, or other service provider. The PD and its sub-domains can be accessed from outside, providing the user initially opens the PD (by a card opening PIN or by other means). The service provider can enter its policy blocks, as well as the relevant coupling factors that define the relationship between the policies of the service operator. Once the service provider has entered its policies into the PEP, these can be updated at will by the service provider, providing such an agreement exists. If there is no such agreement, then the PD must be opened each time by default, for example.

Please replace the paragraph beginning on page 14, line 30, with the following rewritten paragraph:

The LPEP can be realized physically in many different ways. It can be on board in a mobile terminal, it can be part of a network termination equipment in the residence, it can be a separate board which can be inserted into any appropriate terminal when the user wishes to make a call, or it can be a separate PEP board encapsulated together with a suitable wireless access product (such as Bluetooth™ Bluetooth). The PEP may communicate with the client that the subscriber wishes to use for communication according to the principles defined above.

Please replace the paragraph beginning on page 15, line 1, with the following rewritten paragraph:

FIG. 9 shows, by way of overview, in a schematic manner a client or terminal having several interchangeable modems (layer 1, layer 2, . . . , layer n). The policy enforcement point of the terminal authenticates, authorizes, ~~negociates~~ negotiates and requests access, presents credentials, connects service and access, decrypts and encrypts IP payload, collects accounting data, transmits accounting record, updates policies from the operator, and other, all as disclosed above in accordance with the present invention.